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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/816,575	04/01/2004	Gregory E. Borchers	SLA1461	1234
52894 7590 12/07/2007 KRIEGER INTELLECTUAL PROPERTY, INC. P.O. BOX 1073 CAMAS, WA 98607			EXAMINER WANG, JUE S	
			ART UNIT 2193	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/816,575

Applicant(s)

BORCHERS, GREGORY E.

Examiner

Jue S. Wang

Art Unit

2193

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-11 and 13-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-11 and 13-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. Claims 1-4, 6-11, and 13-16 have been examined. Claims 5 and 12 were cancelled in amendment dated September 21, 2007.

#### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guess (US 2003/0204711 A1), in view of Sun et al. (US 2004/0237067 A1, hereinafter Sun).

4. As per claim 1, Guess teaches the claimed invention including a method for preserving configuration data during firmware modification (see abstract, lines 13-16, and [0013]), said method comprising:

a) extracting configuration data from an existing firmware structure in a firmware device (see Fig 3, Fig 4-2, step 270, abstract, [0060], and [0068]);

b) storing said configuration data (see Fig 3, Fig 4-2, steps 280, 290, abstract, lines 13-16, [0060], and [0069]);

c) combining said configuration data with a new firmware structure thereby creating a configured firmware structure (see Fig 3, items 150, 160, [0056], [0064]; EN: the configuration

data is combined with the new firmware since the new configuration data is within the new firmware as shown in Fig 3).

Guess does not teach downloading the configured firmware structure to the firmware device.

Sun teaches a method to dynamically customize software based on user properties and download the customized software to the user (see Fig 6, [0013], [0017], [0018], [0020]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Guess such that the new firmware structured is constructed and then downloaded as taught by Sun because it allows software developers to accurately test the functionality of customized logic (see [0002] of Sun).

5. As per claim 3, Guess teaches the downloading is accomplished via a link between a downloading computing device and said firmware device (see [0023], [0027], and [0055]).

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Guess (US 2003/0204711 A1), in view of Sun et al. (US 2004/0237067 A1, hereinafter Sun), as applied to claim 1 above, further in view of Woodard et al. (US 2002/0104080 A1, hereinafter Woodard).

7. As per claim 2, Guess and Sun do not teach said storing takes place on a web server.

Woodard teaches storing application settings within a remote server system (see Fig 1, Fig 3, [0011], and [0012]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Guess and Sun such that the configuration data is stored in a web server as taught by Woodard because the stored application settings can be retrieved by the subscriber for purposes of restoring a crashed system (see [0012] of Woodard).

8. Claims 4 and 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guess (US 2003/0204711 A1), in view of Woodard et al. (US 2002/0104080 A1, hereinafter Woodard), further in view of Autry (US 6,990,577 B2, hereinafter Autry).

9. As per claim 4, Guess teaches the invention as claimed including a method for preserving configuration data during firmware modification (see abstract and [0013]), said method comprising:

a) extracting configuration data from an existing firmware structure in a firmware device (see Fig 3, Fig 4-2, step 270, abstract, [0060], and [0068]);

b) storing said configuration data (see Fig 3, Fig 4-2, steps 280, 290, abstract, [0060], and [0069]);

c) modifying said configuration data to be compatible with a new firmware structure (see Fig 3, [0056], [0063]);

d) combining said modified configuration data with said new configuration structure thereby creating a configured firmware structure (see Fig 3, items 150, 160, [0056], [0064]).

Guess does not teach said extracting is accomplished over a network connection and storing said configuration data on a web server.

Woodard teaches extracting application settings from a computing device over a network connection and storing the extracted application settings within a remote server system (see Fig 1, Fig 3, Fig 5, [0010] - [0012]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Guess such that the configuration data is extracted over a network connection and stored in a web server as taught by Woodard because the server system provides a network-based, easy, fast, and comprehensive method of extraction/transference of settings and stored application settings can be retrieved by the subscriber for purposes of restoring a crashed system (see [0008] and [0012] of Woodard).

Guess and Woodward do not teach writing the configured firmware structure to said firmware device.

Autry teaches a method of preserving configuration data where a new firmware structure is combined with existing configuration data to form a configured firmware and the configured firmware is written to the firmware device (see Fig 3, Fig 4, abstract, column 1, lines 17-21, column 2, line 44 – column 3, line 15; EN: the configuration data is combined with the new firmware since the new configuration data is within the new firmware as shown in Fig 4 and the configured firmware structure is written to the firmware device when it is written to the firmware memory to replace the existing firmware).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Guess and Woodward such that the configured firmware structure is formed before being written to the firmware device as taught by Autry because the configured firmware structure can be tested first before it replaces the existing firmware structure.

10. As per claim 7, Guess teaches the invention as claimed including a method for preserving configuration data during firmware modification (see abstract and [0013]), said method comprising:

a) extracting configuration data from an existing firmware structure in a firmware device (see Fig 3, Fig 4-2, step 270, abstract, [0060], and [0068]);

b) storing said configuration data (see Fig 3, Fig 4-2, steps 280, 290, abstract, [0060], and [0069]);

d) converting said configuration data to a format compatible with a new firmware structure (see Fig 3, Fig 4-2, step 320, [0056], and [0072]);

e) combining said configuration data with a new firmware structure thereby creating a configured firmware structure (see Fig 3, items 150, 160, [0056], [0064]).

Guess does not teach that the extracted configuration data is uploaded over a network connection.

Woodard teaches that uploading extracted application settings over a network connection (see Fig 1, Fig 3, Fig 5, and [0051] of Woodard).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Guess such that the extracted configuration data is uploaded over a network connection as taught by Woodard because the server system provides a network-based, easy, fast, and comprehensive method of extraction/transference of settings and stored application settings can be retrieved by the subscriber for purposes of restoring a crashed system (see [0008] and [0012] of Woodard).

Guess and Woodward do not teach installing the configured firmware structure to said firmware device.

Autry teaches a method of preserving configuration data where a new firmware structure is combined with existing configuration data to form a configured firmware and the configured firmware is installed to the firmware device (see Fig 3, Fig 4, abstract, column 1, lines 17-21, column 2, line 44 – column 3, line 3; EN: the configured firmware is installed when it is written to the firmware memory replacing the existing firmware).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Guess and Woodward such that the configured firmware structure is formed before being installed on the firmware device as taught by Autry because the configured firmware structure can be tested first before it replaces the existing firmware structure.

11. As per claim 8, Guess does not teach said storing is accomplished on a web server.

Woodard teaches said storing is accomplished on a web server (see [0012]).

12. As per claim 9, Guess further teaches said storing is accomplished on a downloading computing device (see [0046], [0061]-[0062]).

13. As per claim 10, Guess further teaches said storing is accomplished on said firmware device (see [0054] and [0069]).



14. As per claim 11, Guess further teaches said downloading is accomplished over a serial link (see [0023], [0027], and [0055]).

15. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Guess (US 2003/0204711 A1), in view of Woodard et al. (US 2002/0104080 A1, hereinafter Woodard), further in view of Autry (US 6,990,577 B2, hereinafter Autry), as applied to claim 4 above, further in view of Broeksteeg et al. (US 2002/0124243 A1, hereinafter Broeksteeg).

16. As per claim 6, Guess, Woodward, and Autry does not teach said modifying also comprises installing additional configuration data not included in said extracted configuration data.

Broeksteeg teaches a method to convert configuration data for a software update (see abstract, [0008], [0009]), which includes installing additional configuration data not included in the extracted configuration data (see [0011]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Guess, Woodward, and Autry such that the modifying also comprises installing additional configuration data not included in said extracted configuration data as taught by Broeksteeg because the operation of adding a new configuration parameter allows the new software to maintain configuration information about an aspect that was not available in the earlier software (see [0011] of Broeksteeg).

17. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guess (US 2003/0204711 A1), in view of Woodard et al. (US 2002/0104080 A1, hereinafter Woodard), further in view of Sun et al. (US 2004/0237067 A1, hereinafter Sun);-

18. As per claim 13, Guess teaches the invention as claimed including a system for preserving configuration data during firmware modification (see [0074]), said system comprising:

a) a firmware device comprising a memory for storing an upgradeable firmware structure and configuration data (see abstract, [0013], [0029]-[0031], and [0075]);

c) a download computing device (see [0022], [0027], [0055], and [0078]); and

e) a direct connection between said firmware device and said download computing device, wherein configuration data is extracted from said firmware device and combined with a new firmware structure to create a configured firmware structure and write the configured firmware structure to said memory (see Fig 3, Fig 4, abstract, [0056], [0060], [0063]-[0065], [0068]-[0072]).

Guess does not teach a web-based data management utility residing on a server, a network connection connecting said firmware device, said download computing device, and said web-based management utility, and said management utility may recover said configuration data from said firmware device and store said configuration data on said server.

Woodard teaches a web-based data management utility residing on a server (see Fig 3, abstract, [0038], [0049], [0050]), a network connection connecting a computing device, a download computing device, and said web-based management utility (see abstract, [0009]-

[0013]), and said management utility may recover application settings from a computing device and store said application settings on said server (see Fig 5, abstract, and [0051]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the system of Guess to contain a web-based data management utility residing on a server, a network connection connecting said firmware device, said download computing device, and said web-based management utility, and said management utility may recover said configuration data from said firmware device and store said configuration data on said server as taught by Woodard because the server system provides a network-based, easy, fast, and comprehensive method of extraction/transference of settings and stored application settings can be retrieved by the subscriber for purposes of restoring a crashed system, transference to a repaired or new system, converted for use on a new differing device or updated to reflect changes in software (see [0008] and [0012] of Woodard).

Guess and Woodard also do not teach that the combining of configuration data with a new structure to create a configured firmware structure and writing the configured firmware structure to the memory is done by the management utility.

Sun teaches a management utility (i.e., packaging system) to dynamically customize software based on user properties and download the customized software to the user (see Fig 6, [0013], [0017], [0018], [0020]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Guess and Woodard such that the combining of configuration data with a new structure to create a configured firmware structure and writing the configured firmware structure

to the memory is done by the management utility as taught by Sun because it allows software developers to accurately test the functionality of customized logic (see [0002] of Sun).

19. As per claim 14, Guess further teaches said configuration data is converted to a new format before combination with said firmware structure (see Fig 3, Fig 4-2, step 320, [0055]-[0057], and [0072]).

20. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guess (US 2003/0204711 A1), in view of Woodard et al. (US 2002/0104080 A1, hereinafter Woodard), further in view of Sun et al. (US 2004/0237067 A1, hereinafter Sun), as applied to claim 13 above, further in view of Broeksteeg et al. (US 2002/0124243 A1, hereinafter Broeksteeg).

21. As per claim 15, Guess, Woodard, and Sun do not teach said configuration data is compile with additional configuration information not included in said extracted configuration data before combination with said new firmware structure.

Broeksteeg teaches a method to convert configuration data for a software update (see abstract, [0008], [0009]), which includes installing additional configuration data not included in the extracted configuration data (see [0011]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Guess, Woodard, and Sun such that the configuration data is compile with additional configuration information not included in said extracted configuration data before combination with said new firmware structure as taught by Broeksteeg because the operation of

adding a new configuration parameter allows the new software to maintain configuration information about an aspect that was not available in the earlier software (see [0011 of Broeksteeg).

22. As per claim 16, Broeksteeg does not specifically teach said additional configuration information is obtained by querying network devices. However, Broeksteeg teaches that the additional configuration information is obtained as part of the update stream where the update stream is from a remote location in a network (see [0014], [0023], [0028]). While Broeksteeg teaches the update stream is broadcasted, it would have been obvious to one of ordinary skill in the art at the time of the invention that another common method of obtaining updates in an apparatus is for the apparatus to query remote locations which could be a network device for updates. In this alternative method obtaining updates, the additional configuration information obtained as part of the update is obtained by querying the remote location that supplied the update.

### *Response to Arguments*

23. Rejection of Claims 1-16 under 35 U.S.C. 112, second paragraph:

24. The rejections of claims 1-16 are overcome by applicants' amendments.

25. Rejection of Claims 1-16 under 35 U.S.C. § 102(e) and 35 U.S.C. § 103(a):

26. Applicants' arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection.

*Conclusion*

27. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Liu et al. (US 5,155,837) is cited to teach installing a new software version in a different partition such that the new version can be verified before it is used.
- Chen et al. (US 2005/0102660 A1) is cited to teach initialization and update of firmware in electronic devices.

28. Applicant's amendment necessitated the new ground(s) of rejection presented in this office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP §706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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29. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jue S. Wang whose telephone number is (571) 270-1655. The examiner can normally be reached on M-Th 7:30 am - 5:00pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jue Wang  
Examiner  
Art Unit: 2193

**MENG-AI AN**  
SUPERVISORY PATENT EXAMINER  
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